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EXAMINER

NGUYEN, TRAN N

ART UNIT PAPER NUMBER

2834

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

| | | | |
|------------------------------|-----------------|---------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/602,966 | GOCHE, GERALD | |
| | Examiner | Art Unit | |
| | Tran N. Nguyen | 2834 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 26 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 24-41 is/are pending in the application.
- 4a) Of the above claim(s) 37-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 24-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION*Restriction*

Original claims 19-22 did not recite the step-by-step method of making a single or a multiphase electric machine but rather reciting the structural relationship between the main windings and the additional windings with capacitors. Thus, **claims 19-22 were treated as structural claims instead of method claims.**

Newly claims 37-41 recite a step-by-step method of winding and arranging main and secondary coils in an electrical machine. Newly submitted claims 37-41 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The application is now having two inventions. Group I, claims 24-36, is drawn to structure arrangement of the windings, while group II, claims 37-41, is related as process of ~~making and product made.~~ The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different products or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case there are various methods to fabricate main winding including automatic machinery process and/or manual process, wherein each process having various orders of fabricating steps. Also, the method of forming claimed main winding in the present invention can be employed to form other magnetic elements such as magnetic sensor, magnetic bearings, magnetic brake and magnetic switches.

Even though the structure claims and the method groups of claims both recite the main winding having first and second conductor and a capacitor. However the structure claims drawn to the structural location and features of the winding arrangement with respect to the capacitor, while the method of forming the main winding dealing with the processing steps of selecting the sizes of the wire, steps of winding the wire, and coupling the capacitor. As for the method claims, the sequential processing steps to fabricate the winding are the primary factors for determining the patentabilities. On the contrary, in the structure claimed invention, the structural relationships of the winding components arrangement are factors for determining the

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patentabilities. Thus, there are two independent and distinct classes for the structure claimed invention (class 310/179) and for the method claimed invention (class 29/596).

Furthermore, in the determinations of patentability for claims of a method of making a device, the fabrication process includes its sequential fabricating steps and/or tools used in these steps of forming the device are considered significant.

On the contrary, in the determinations of patentability for claims of the device's structure the limitations of device's elements and their structural relationships as well as their functional/operational relationships are considered significant. In other words, in the device claimed invention, or in a product-by-process feature of a device, the method of forming the device is not germane to the issue of patentability of the device itself. (*In re Thorpe*, 227 USPQ 964, 966.)

Therefore, The fields of search for a method of making a device and for a structure of the device, i.e., the product, are not coextensive and the consideration for patentabilities are different and independent. This is the reason why there are two different and separate classifications for the method of forming the lamination core and the lamination core structure.

Since applicant has received an action on the merits for the originally presented invention, i.e., the structure claims, this invention has been constructively elected by original presentation for prosecution on the merits. **Therefore, claims 24-36 are pending. Claims 37-41 are hereby withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.**

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-36 are rejected under 35 U.S.C. 112, ***first paragraph***, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 24 recites “*a plurality of main windings, each of the main winding having a first conductor having a first wire cross sectional area, and a second conductor having a second wire cross sectional area, wherein the first conductor is selected to have a larger wire cross sectional area than the second wire cross sectional area at least on capacitor operatively coupled in series to the second conductor (of the main winding).*”

Claim 27 recites “*the second conductor (of the main winding) has a second wire cross sectional area of about 1/3 of the sum of the cross sectional areas of the first conductor and the second conductor in each of the plurality of the main windings*”

These recitations contain subject matter that is not described in the specification.

The specification discloses the following:

[0011] first and second **main windings** coupled to the main common point, and first and second **additional windings**, i.e., de-saturation or known as auxiliary/secondary winding, ***coupled to a winding capacitor.***

[0013] there are a main wire size and an additional wire size, in which the main wire size is about twice the additional wire size.

[0035], fig 5, an three phase motor with three main (primary) winding (1-3) and three additional (secondary) winding being fed to three capacitors respectively connected in series.

[0052] the main winding divided into two half-sections (1a, 1b) only separated by a point “O”, while the additional (secondary) winding being divided into two half-sections (5a, 5b) are separated by capacitor (6).

Thus, according to the spec, the main winding either is a whole structure or divided into two half-sections that connected by a common point, and the main winding has a main-wire size. The secondary winding is either a whole structure fed to a capacitor or divided into two half-sections that connected to a capacitor, and the additional (secondary) winding has an additional-wire size that is different from the main-wire size, specifically the main-wire size is twice the

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additional-wire size. (These features were recited in the original claims, which are now being canceled.)

Therefore, based on the specification, the recitation of claims 24 and 27 about an electric machine comprising

(1) a plurality of main windings, each of the main winding having a first conductor having a first wire cross sectional area, and a second conductor having a second wire cross sectional area, wherein the first conductor is selected to have a larger wire cross sectional area than the second wire cross sectional area. And, more, specifically, the second conductor (of the main winding) has a second wire cross sectional area of about 1/3 of the sum of the cross sectional areas of the first conductor and the second conductor in each of the plurality of the main windings.

These recitations contain **new subject matters** that are not disclosed or supported by the specification. According to the spec, as the matter of fact, there is an additional (secondary) winding that has a second wire cross sectional area being different from that of main winding.

(2) at least on capacitor operatively coupled in series to the second conductor (of the main winding)”

These recitations contain **new subject matters** that are not disclosed or supported by the specification. According to the spec (fig 8), as the matter of fact, the two half-sections of the main winding, i.e., main winding's first and second conductors, are connected by a common points, while, the first and second conductors of the additional (secondary) winding are coupled in series to a capacitor.

Claims 24-36 are rejected under 35 U.S.C. 112, **second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 24, *“An electric machine for saving energy when connected with an external power source, energy savings of the electric machine being compared to a state-of-the-art energy-saving-modified conventional motor, the conventional motor originally having conventional windings with a conventional wire cross section area, the conventional motor being modified to crate a saving energy by having the conventional windings separated into a separate*

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primary winding displaced from a secondary winding, the secondary winding being connected to a capacitor in series electrically, the capacitor being selected to have a capacitance equal to the theoretically rated horsepower of the motor times the square of the constant based voltage times a factor of 1.4 divided by the square of the phase line voltage” is indefinite because of the following:

The whole recitation above simply describing a particular motor that being compared to the claimed motor. However, it is unclear what is so-called “state-of-the-art energy-saving-modified conventional motor, the conventional motor originally having conventional windings with a conventional wire cross section area”. The terms “conventional motor”, “conventional winding” and “conventional wire cross section area” are indefinite because what is “conventional”? There are numerous types of motors, countless ways of arranging windings in either stators or rotors of motors, and numerous sizes of wire with different cross sectional areas or shapes.

Given the 35 USC 112, first paragraph and second paragraph, deficiencies set forth above, no rejection based on the prior art is given.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (571) 272-2030. The examiner can normally be reached on M-F 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tran N. Nguyen', with a long horizontal flourish extending to the right.

Tran N. Nguyen
Primary Examiner
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